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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/796,734

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Hiroataka Kobayashi

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EXAMINER

AGGARWAL, YOGESH K

ART UNIT

PAPER NUMBER

2622

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/796,734	<b>Applicant(s)</b> KOBAYASHI, HIROTAKA	
	<b>Examiner</b> YOGESH K. AGGARWAL	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 3-5, 7-10, 12-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3-5, 7-10, 12-15 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/12/2008</u>  | 6) <input type="checkbox"/> Other: _____                          |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/24/2008 has been entered.

***Response to Arguments***

2. Applicant's arguments filed 07/24/2008 have been fully considered but they are not persuasive.

**Examiner's response:**

3. Applicant argues that the cited prior art fails to disclose an LED as a light source used in a flash unit of a camera module or in a camera device, e.g. Kazuhisa et al., while disclosing the use of an LED for illumination, does not disclose a camera module of the type claimed. Rather, Kazuhisa discloses a conventional film camera that is preloaded with a film package. The Examiner respectfully disagrees. The claim does not recite a digital camera and only recites a camera module which includes a film or digital camera.

4. Applicant argues with regards to claim 3 that Kobayashi fails to teach disclose wherein the emission area of the LED is disposed lower than said lens of the camera module with reference to a surface of a board to which the camera module is attached. The Examiner respectfully disagrees. However in Kobayashi in figure 3 depending on how the camera is held will determine if the flash unit is lower than the camera module.

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5. Regarding the newly added limitations of LED and camera being on the same substrate, Nishimura is being used to teach that limitation.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 9, 10, 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuhisa (JP 11-133490) in view of Fuke et al. (US Patent 6,011,929) and Kobayashi (US Patent 6,823,198) and in further view of Nishimura (US Patent # 6,448,550).

5. With regard to claim 3 Kazuhisa discloses a flash unit comprising: an LED (light emitting diode 1, FIG. 1); a guide which is disposed between the LED and the output portion for preventing the light emitted from the LED from dispersing (reflector 2, FIG. 1), wherein the guide has an opening section that is equal to the emission area of the LED, and the opening section is disposed in proximity of the emission area or in contact with the emission area (FIG. 1). Kazuhisa fails to disclose a light condensing plate which comprises a light dispersing surface on a side of the light condensing plate facing the LED to equalize intensity of light emitted from the LED and a convexo-concave surface on the other side of the light condensing plate for condensing the light emitted from the LED. Fuke et al. disclose a light condensing plate which comprises a light dispersing surface (diffusion controlling portion 6, FIG. 2A) on a side of the light condensing plate facing the light emitting element to equalize intensity of light emitted

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from the light emitting element and a surface (condensation controlling portion 7, FIG. 2A, column 6 lines 33-43) on the other side of the light condensing plate for condensing the light emitted from the light emitting element. It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the flash unit of Kazuhisa to include the lens taught by Fuke et al. in order to prevent distortion of colors and/or lighting caused by the flash operation when photographing (Fuke et al. column 7 lines 9-17).

Kazuhisa and Fuke et al. fail to disclose a camera module, the LED being adjacent to the camera module on a substrate. Kobayashi discloses a camera module (electronic camera 18, FIG. 1), the light emitting element (electronic flash 22, FIG. 1) being adjacent to the camera module on a substrate (FIG. 3). It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the flash unit of Kazuhisa and Fuke et al. to be the flash module of Kobayashi in order to prevent the uneven light distribution from the flash unit (Fuke et al. abstract) and to miniaturize and reduce the cost of the flash device (Kazuhisa, Abstract: Problem to be solved). Kazuhisa, Fuke et al. and Kobayashi fail to disclose a camera module and the LED being formed directly on a substrate. However Nishimura teaches FIG. 1 shows the layout of a solid state illumination device according to the present invention. While mounting LEDs and photosensors on the same substrate increases manufacturing efficiency (col. 2 lines 10-29, figure 1). Therefore taking the combined teachings of Kazuhisa, Fuke, Kobayashi and Nishimura it would be obvious to one skilled in the art at the time of the invention to have been motivated to have used a camera module and the LED being formed directly on a substrate in order to increase manufacturing efficiency.

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8. With regard to claim 4 Kobayashi discloses wherein the light condensing plate (protector 30, FIG. 1) is unitarily formed with a lens (taking lens 20, FIG. 1) of the camera module [the Q flash device and the camera module are unitarily part of the portable phone 10].

9. With regard to claim 9 Kobayashi disclose wherein the emission area of the LED is disposed lower than said lens of the camera module with reference to a surface of a board to which the camera module is attached [depending on how the camera is held will determine if the flash unit is lower than the camera module].

10. Claim 10 is rejected under the same analysis as claim 3.

11. Claim 12 is rejected under the same analysis as claim 4.

13. All limitations of claim 17 are addressed in the rejection of claim 3, claim 17 is likewise rejected.

14. Claims 5, 7, 8, and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazuhisa (JP 11-133490) in view of Fuke et al. (US Patent 6,011,929) and Kobayashi (US Patent 6,823,198), Nishimura (US Patent # 6,448,550) as applied to claims 3, 4, 10, and 12 above, and further in view of Fumio et al. (US 2002/0089601 A1).

15. With regard to claim 5 Kazuhisa, Fuke et al, and Kobayashi and Nishimura disclose the camera device according to claim 3 but fail to disclose the camera device wherein the light condensing plate is unitarily formed with a lens cover of the camera module. Fumio et al. disclose the camera device wherein the light condensing plate is unitarily formed with a lens cover (lens cover 8, FIG. 4) of the camera module. It would have been obvious at the time of the invention to one of ordinary skill in the art to modify the camera device of Kazuhisa, Fuke et al,

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and Kobayashi and Nishimura to include the lens cover taught by Fumio et al. in order to protect the lens system from damage and scratches when the camera portion is not in use.

16. With regard to claim 7 Fumio et al. disclose wherein a thickest dimension T of a plate J area between the light condensing plate and said lens is T1.0 mm (FIG. 4) [when the lens cover 8 is closed the condensing plate of the flash device is going to be directly adjacent to the lens system 6, thus having a distance T\_1.0 mm].

17. With regard to claim 8 Fumio et al. disclose wherein a thickest dimension T of a plate area between the light condensing plate and lens cover is T1.0 mm (FIG. 4) [the condensing plate is a part of the lens cover 8, thus there is no distance between them]. )

18. Claim 13 is rejected under the same analysis as claim 5.

19. Claim 14 is rejected under the same analysis as claim 7.

20. Claim 15 is rejected under the same analysis as claim 8.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH K. AGGARWAL whose telephone number is (571)272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yogesh K Aggarwal/  
Primary Examiner, Art Unit 2622